

10. Dividend Policy

Meaning of Dividend

“ Dividend is that part of net profit which is paid in cash by the company to its shareholders after exclusion of the retained profits.

Dividend is distributed amongst the shareholders of the company in proportion of their shares in a manner as is prescribed by law. Dividend is distributed to shareholders out of profits or reserves available for this purpose.

Dividend policy determines what portion of earnings will be paid out to stock holders and what portion will be retained in the business to finance long-term growth. Dividend constitutes the cash flow that accrue to equity holders whereas retained earnings are one of the most significant sources of fund for financing the corporate growth. **Dividend and retained earnings are conflicting goals to each other. Higher dividend means less retained earnings and vice versa.** This position is quite challenging for the finance manager and necessitate the need to establish a dividend policy in the firm which will evolve a pattern of dividend payments having no adverse effects on future actions of the firm.

Firm-oriented matters relating to dividend policy can be grouped under the following six categories, affecting directly or indirectly the determination and the appropriateness of the policy:

- (1) Firms' contractual obligations, restrictions in loan agreement and/or legal limitations consideration; and insufficiency of cash to pay dividends.
- (2) Liquidity, credit standing and working capital requirement and considerations. Ability to borrow, nature of stockholders, degree of control, timing of investment opportunities, inflation and need to repay debt.
- (3) Need for expansion-availability of external finance, financial position of promoters, relative cost of external funds, the ratio of debt.
- (4) Business cycle considerations.
- (5) Factors relating to future financing.
- (6) Past dividend policies and stockholder's relationship.

Essentials of a Sound Dividend Policy

- (i) Distribution of Dividend in Cash
- (ii) Initially Lower Dividend
- (iii) Gradual Increase in Dividend
- (iv) Stability of Dividend
- (v) Dividend should be declared out of retained earnings

Residual Theory of Dividend Policy

According to Ezra Solomon, dividend policy is strictly a financing decision, the payment of cash dividend is a passive residual. The amount of dividend pay-out will fluctuate from period to period in keeping with fluctuations in the amount of acceptable investment opportunities available to the firm. If the opportunities are abound, percentage of pay-out is likely to be zero;

on the other hand, if the firm is unable to find out profitability investment opportunities, pay-out will be 100 percent. The theory implies that investors prefer the firm retain and reinvest earnings rather than pay them out in dividends if the return on reinvested earnings exceeds the rate of return the investors could themselves obtain on other investments of comparable risks.

Factors Affecting Dividend Policy

The factors affecting dividend policy can be categorized as internal factors and external factors :

(A) Internal Factors

- (i) **Nature of Earnings :** The amount and stability of earnings of a company is the most important aspect of dividend policy. These are affected by the nature of industry to which the company belongs. Firms dealing in necessities have more stable income than those dealing in luxuries and fancy goods.
- (ii) **Future Fund Requirements :** If the company distributes whole of its earnings among the shareholders as dividend, it will face difficulties in taking new projects or meeting increased needs of working capital. Therefore, if the company has viable and profitable investment proposals, it should retain maximum earnings and the balance, if any, should be distributed among shareholders as dividend. Newly established companies opt to restrict the payment of dividend and retain a substantial part of their earnings. While older companies can formulate more liberal and consistent dividend policy.
- (iii) **Liquidity of Funds :** A company's capacity to pay dividends will be determined primarily by its ability to generate adequate stable profits and cash flows i.e., liquidity. If there is a shortage of cash, question of payment of dividend does not arise even though the company has sufficient profits. In such a situation, it is better to declare stock dividend i.e., issue bonus shares.
- (iv) **Shareholders' Preference or Desire :** The shareholders desire for current dividend income than capital gains from sale of shares due to increase in market value of shares greatly influences the dividend policy of a company.
- (v) **Control Motive :** The existing shareholders or management's control motive also influences the dividend policy of a company. When a company pays high dividend, its cash position is adversely affected. This results in issue of new shares for financing the investment programmes. To maintain control of the existing shareholders, it is desirable to declare lower dividend so that the company can meet its financial requirements from its retained earnings without issuing new shares to the public.

(B) External Factors

- (i) **General State of Economy :** The economic and business conditions as they prevail at a particular time may influence the firm's decision to distribute or retain the profit. For example, in case of uncertain economic or business conditions, the management may be inclined to retain a major portion of earnings with it to meet out the contingencies of the situation.
- (ii) **Firms' Access to Capital Market :** A company can pay dividend, despite of its weak liquidity position, provided it can sell its debentures or shares in the capital market. The new companies find it difficult to borrow from the market and hence they cannot afford to pay dividends at the higher rates.

- (iii) **Legal Restrictions :** The dividend policy of a company does not entirely depend upon the choice of shareholders or financial requirements of the company. But, it should be evolved within the legal frame work and restrictions. The Companies Act provides that the dividends can be paid only out of current profits or past profits after providing for depreciation.
- (iv) **Contractual Restrictions :** Certain lenders to the company also impose restrictions regarding payment of dividend for the safety of their loans. Such restrictions may be such that dividend shall not be declared if the debt equity ratio is found less than 1.5 : 1 or liquidity ratio is less than 2 : 1, transfer of a certain amount to redemption fund created for their redemption of debt; payment of dividend out of the income earned after debt agreement etc.. When such restrictions are imposed, dividend is paid at lower rate by retaining a larger portion of profit.
- (v) **Government's Economic and Tax Policies :** The earning capacity of the company is widely affected by the changes in fiscal, industrial, labour and other policies of the government. Example, increase in the bank rate of margin limit in financing against securities by government may cause financing facilities costly and more dependence on internal sources.

10.1 Different Types of Dividend Policies and Determination

(i) **Stable or Regular Dividend Policy Theory:** Profit of the firm fluctuates considerably with changes in the level of business activity. Most companies seek to maintain a target dividend per share. However, dividend increases with a lag after earnings rise and this increase in earnings appear quite sustainable and relatively permanent. When dividends are increased, strenuous efforts are made to maintain them at increased new level. This stability could take three forms:

1. Keep dividends at a stable rupee amount but allow its pay-out ratio to fluctuate.
2. Maintain stable pay-out ratio and let the rupee dividend fluctuate, or
3. Set low regular dividend and then supplement it with year end 'extras' in years when earnings are high.

As earnings of the firm increase the customary dividend will not be altered but a year and 'extras' will be declared.

(ii) **Policy of Regular plus Extra Dividend :** Under this policy, a company pays fixed dividend per share to the shareholders and an extra dividend in the years of prosperity. 'Extra' is used in connection with the payment to tell the shareholders that this is extra and may not be maintained in future.

The policy of regular and extra dividend provides flexibility to the company. This policy is more suitable to those companies who earn abnormal or extra ordinary income in a particular year.

(iii) **Policy of Regular Bonus Dividend :** Under this policy, the company pays dividend in the form of its shares instead of cash. Such shares are designated as '**Bonus Shares**' which is often used to capitalise company's retained earnings. It does not at all affect the liquidity position of the company but increases the shareholding of the owners.

(iv) Policy to Pay Irregular Dividend : Under the policy of irregular dividend, the amount of dividend to be paid by the company to shareholders fluctuates with the changing level of earnings. The larger the earnings, the higher is the dividend and vice-versa. This policy is adopted due to : (i) uncertainty of earnings; (ii) inefficient operations of business; (iii) shortage of cash and (iv) fear of adverse effect of regular dividend policy on the financial position of the company.

(v) Policy of No Immediate Dividend : When directors of the company decide to declare no dividend despite large earnings, then it is known as policy of no immediate dividend.

After the expiry of no dividend period, the company should either purpose the policy of paying stock dividend from its reserves or company's shares should be split into shares of small amount so as to keep dividend per share low and larger amount of dividend to shareholders.

10.2 Forms of Dividend

Preference Dividend

Preference dividend is paid on preference shares. *It is paid at the fixed rate which is mentioned at the time of issue of preference shares. This dividend is paid before the payment of equity dividend.* The decision to pay or not to pay preference dividend is taken by the board of directors. But, the board of directors have no freedom of choice to reduce the rate of preference dividend.

Equity Dividend

Equity dividend is paid on equity shares at the rate recommended by the board of directors and approved by the shareholders in annual general meeting. *The board of directors have freedom of choice with regard to payment or non-payment of equity dividend, the rate of dividend and the medium of dividend i.e. cash dividend or non-cash dividend.*

Interim Dividend

Interim dividend is the dividend paid by the board of directors at any time between two annual general meetings of the company, if the articles of association of the company so permits. It is generally declared and paid when the company has earned huge profits or abnormal profits during the year and the directors wish to distribute these profits to the shareholders.

Cash Dividend

This is the most popular form of dividend which is distributed to the shareholders in cash out of the earnings of the business or short-term loans taken from the bank. Generally, shareholders are interested in cash dividend. The payment of dividend in cash indicates cash outflows from the firm to the shareholders, hence it necessitates availability of sufficient funds with the firm and a good liquidity position.

Stock Dividend or Bonus Shares

Sometimes a company cannot pay dividend in cash due to shortage of liquid funds in spite of large amount of reserve and surplus. Under such circumstances, *the company issues new shares to the existing shareholders in lieu of paying dividend in cash. Such shares are known as 'Stock dividend' or 'Bonus Shares'.* The issue of bonus shares is the conversion of profits into capital, therefore, it is also called '*capitalisation of profits*'.

Scrip or Bond Dividend

*Scrip dividend is the dividend paid by a company to its shareholders in the form of scrips i.e., shares and debentures of other companies or a promissory note. This form of dividend is used by a company when it faces a temporary financial crisis in spite of high earnings. Scrip and bond dividend differ only in respect of time period. Such dividends are not in practice in India after the companies Amendment Act, 1960. **Scrip or bond dividend or property dividend can not be paid and it is no longer legal in India.***

Dividend Models

Walter Model : Professor James E. Walter has developed a theoretical model which shows the relationship between dividend policies and common stocks prices. *According to him the dividend policy of a firm is based on the relationship between the internal rate of return (r) earned by it and the cost of capital or required rate of return (K_e).*

Assumptions of the model:

- The internal rate of return (r) and the cost of capital (K_e) are constant.
- All new investment opportunities of the firm are to be financed through retained earnings only and no external finance is available to the firm.
- The firm has perpetual or an infinite life.

As per this model, the investment decisions and dividend decisions of a firm are inter related. A firm should retain its earnings if the return on investment exceeds the cost of capital. Such firms are called Growth Firms ($r > K_e$). Such firms should have zero pay-out and should re-invest their entire earnings. On the other hand, a firm should distribute its earnings to the shareholder if the internal rate of return is less than the cost of capital ($r < K_e$). Such firms are called declining firms. Such firms should distribute the entire profits i.e. 100 per cent pay-out ratio. Firms with internal rate of return equal to the cost of capital ($r = K_e$) are called Normal Firms. In such firms, the shareholders will be indifferent whether the firm pays dividends or retain the profits.

The formula to determine the market value of share as suggested by Prof. Walter is as under :

Focus formula



$$P = \frac{D}{K_e} + \frac{r(E - D) / K_e}{K_e}$$

where; P = Market Price per share

D = Dividend per share

r = Internal rate of return

E = Earnings per share

K_e = Cost of equity capital or capitalization rate.

Remember:

- For Growth Firms $r > K_e$
- For Declining Firms $r < K_e$
- For Normal Firms $r = K_e$

Illustration : Santosh Limited earns Rs.5 per share is capitalized at a rate of 10% and has a rate of return on investments of 18%. According the Walter's Formula:

- (i) What should be the price per share at 25% dividend pay-out ratio?
- (ii) Is this optimum pay-out ratio?

Solution :

- (i) Value per share as per Walter formula

$$P = \frac{D}{K_e} + \frac{r(E - D) / K_e}{K_e}$$

where; P = Market price per share

D = Dividend per share

r = Internal rate of return

E = Earnings per share

K_e = Cost of equity capital or capitalization rate.

Substituting the values in the above formula, we get.

$$\begin{aligned} P &= \frac{1.25}{0.10} + \frac{0.18(5 - 1.25) / 0.10}{0.10} \\ &= 12.5 + 67.50 \\ &= \text{Rs.80} \end{aligned}$$

- (ii) As per above calculation at 25% dividend pay-out, the value of share is Rs.80. But, according to Walter's model, it is not an optimum dividend pay-out because, in such case where internal rate of return is more than the cost of capital ($r > K_e$), he has suggested zero dividend pay-out.

Criticisms of Walter Model

The Walter's model provides a single framework to explain the relationship between dividend policy and value of the firm. If the assumptions underlying the model hold good, the behaviour of the market price of the shares in response to dividend policy of this firm can be explained with the help of this model. But, actually these assumptions are unrealistic and that is why the model is criticised on the following grounds :

- (1) **Absence of External Financing :** Prof. Walter's main assumption is that financing of investment proposals are only by retained earnings and no external financing is seldom found in real life. Most of the firms meet their financial requirements by loans or issuing new shares.
- (2) **Stable Internal Rate of Return :** The rate of return earned by the firm is never stable. Actually, the rate of return changes with the increase in investments.
- (3) **Stable Cost of Capital :** The assumption of constant cost of capital is also unrealistic, because the risk complexion of the firm is not always uniform. Therefore, cost of capital also changes.

Gordon's Model

Gordon says that an investors values current dividends more highly than expected future dividends. According to Gordon, the market value of a share is equal to the present value of its expected future dividends. It can be calculated using the following formula :

FOCUS Formula



$$P = \frac{D}{K_e - b_r} \text{ or } \frac{E(1-b)}{K_e - b_r}$$

where P = Price of share

E = earnings per share

b = Retention ratio or percentage of earnings retained

$(1 - b)$ = dividend pay-out ratio, i.e. percentage of earnings distributed as dividend

K_e = Capitalizations rate/cost of capital

b_r = growth rate in r , i.e. rate of return on investment of an all equally firm.

Assumptions of the Model

- The internal rate of return (r) and the cost of capital (K_e) of the firm remains constant.
- The firm operates its investment activities only through equity.
- There does not exists corporate taxes.
- The retention ratio, once decided is constant for ever.
- The firm has perpetual life.

Criticisms of Gordon's Model of Dividend

The Gorden Model is criticised for the following reasons :

- In real world, the constant dividend growth and earnings growth is a fallacy.
- The investors will buy and hold the shares for an indefinite period of time is a false assumption.
- The model ignores capital gains, allowance for corporate and personal taxation.
- The diminishing marginal efficiency of investments is ignored.
- The effect of change in the firm's risk class and its effect on firm's cost of capital is ignored.

Modigliani and Miller Model (M-M Model)

Modigliani and Miller say that dividend decisions and retained earning decisions do not influence the market value of the shares, i.e. dividend policy is irrelevant for valuation.

Assumptions

- There exists a perfect capital market.
- There are no floatation or transaction costs.
- There are no taxes.
- Future earnings are known with certainty.

Focus Formula



The model is expressed by the formula:

$$P_0 = \frac{D_1 + P_1}{1 + K_e}$$

Here; P_0 = Market price per share at the beginning of the period or prevailing market price of a share.

D_1 = Dividend to be received at the end of the period

P_1 = Market price per share at the end of the period

K_e = Cost of equity capital or capitalization rate

The market price of share (P_1) at the end of the period can be calculated by following formula:

$$P_1 = P_0(1 + K_e) - D_1$$

Alternative Formula: By assuming that, the fulfillment of desired investment due to dividend declaration, is being done by issuing of new shares. In other words, Modigliani and Miller approach can also be explained as follows:

$$nP_0 = \frac{(n+m)P_1 - (I - X)}{1 + K_e}$$

Here; n = Number of shares outstanding at the beginning of the period

m = Number of new shares to be issued at the end of the period

P_1 = Market price per share at the end of the period

I = Total net profit or earnings of the firm during the period

K_e = Cost of equity capital

No. of shares issued at the end of the period (m) can be calculated by the following formula :

$$m = \frac{I - (X - nD_1)}{P_1}$$

Here; D_1 = Dividend to be paid at the end of the period.

Example : (M-M's Formula) : Alpha Limited has outstanding 1,00,000 shares selling at Rs.100 each. The firm is thinking of declaring a dividend of Rs.5 per share at the end of the year. The capitalization rate is 10%. What will be the price of the shares at the end of the year if (i) a dividend is not declared; (ii) a dividend is declared?

Solution : $P_1 = P_0(1 + K_e) - D_1$

where P_1 = Market price per share at the end of the period

D_1 = Dividend to be received at the end of the period

K_e = Cost of equity capital or capitalization rate

Substituting the values in the above formula, we get:

(i) When dividend is not declared:

$$\begin{aligned} P_1 &= 100(1 + 0.10) - 0 \\ &= 100 \times 1.10 = \text{Rs.110} \end{aligned}$$

(ii) When dividend is declared:

$$\begin{aligned} P_1 &= 100(1 + 0.10) - 5 \\ &= 100 \times 1.10 - 5 \\ &= 110 - 5 = \text{Rs.105} \end{aligned}$$

Criticisms of M-M approach

M-M approach has been criticised on many grounds particularly the invalidity of his assumptions. For example :

- (1) **No Perfect Market** : In the real world, there are many imperfections in the capital market. Perfect market does not exist.
- (2) **Taxes with Different Rates** : There exists taxes with different rates for different types of income. For example, the tax rates for dividend income and capital gains differ.
- (3) **Presence of Flotation Costs** : There are flotation costs and transaction costs involved in equity issues. The M-M assumption of non-existence of flotation and transaction costs is not true.
- (4) **Uncertainty** : One cannot be certain about the future investment opportunities and future earnings. It cannot be said with certainty that the firm will declare and pay dividends to shareholders at the end of the period. Again, the future of the firm may be uncertain. The funds may be invested in unprofitable projects resulting in loss.

The M-M approach thus does not offer a valid explanation of the above proposition.

Ques. Which one of the following assumptions is not included in the James E. Walter Valuation model ?
(NTA UGC-NET June 2015 P-III)

- (A) All financing by retained earnings only
- (B) No change in the key variables such as EPS and DPS
- (C) The firm has finite life
- (D) All earnings are either distributed as dividends or invested internally immediately

Ans. (C) The firm has finite life

Ques. Dividend capitalization model was developed by _____ (NTA UGC-NET Dec. 2014 P-II)

- (A) Ezra Solomon
- (B) Myron J. Gordon
- (C) James E. Walter
- (D) Merton H. Miller and Franco Modigliani

Ans. (B) Myron J. Gordon

Ques. Dividend irrelevance hypothesis is implied in the _____ (NTA UGC-NET Dec. 2013 P-III)

- (A) Traditional Model
- (B) Walter Model
- (C) Gordon Model
- (D) M.M. Model

Ans. (D) M.M. Model

Ques. Dividend is not relevant in determining the value of the company. Who among the following held this opinion ?
(NTA UGC-NET Dec. 2015 P-II)

- (A) J.E. Walter
- (B) Ezra Soloman
- (C) Modigliani - Miller
- (D) M.J. Gordon

Ans. (C) Modigliani - Miller

10.3 Risk and Return Analysis

Return

The rate of return on an asset/investment for a given period is the annual income received plus any change in market price, usually expressed as a per cent of the opening market price.

Focus formula



$$R = \frac{D_t + (P_t - P_{t-1})}{P_{t-1}}$$

where D_t = Dividend/annual income at the end of year

P_t = Market price at close of year (closing price)

P_{t-1} = Market price at close of year (opening price)

Returns can be drawn from an asset in two ways.

- (i) Current yield called as revenue earnings by usage of asset.
- (ii) Capital/gain/loss by liquidating the asset at profit/loss.

Risk

The variability of the actual return from the expected returns associated with a given asset/investment is defined as risk. The greater the variability, the riskier the security. The more certain the return from the asset (e.g., T Bills), the less is risk of security.

Measurement of Risk

The risk associated with a single asset is assessed from both a behavioral and a statistical point of view.

- The behaviour view of risk can be obtained by using
 - Sensitivity Analysis
 - Probability (Distribution)
- The statistical view of risk are
 - Standard Deviation
 - Coefficient of Variation

Sensitivity analysis : It takes into account a number of possible outcomes while evaluating an asset's expected returns. In order to have a sense of the variability among return estimates, a possible approach is to estimate the worst (pessimistic), the expected (most likely) and the best (optimistic) return associated with the asset. The level of these outcomes may also be related to the state of economy like recession, normal and boom conditions. The difference between the optimistic and the pessimistic outcomes is the range which is the basic measure of risk. The greater the range, the more riskier the asset is.

Consider two machines 'A' and 'B' having some initial cost Rs 75 lakh each. Consider the figures in Table given below.

Amount in Lakhs	Machine A	Machine B
Machine initial Outlay	75	75
Annual Return		
Pessimistic	10	12
Most Likely	15	16
Optimistic	18	25
Range	8	13

On the basis of range of annual returns, machine B is more risky. The sensitivity analysis provides more than one estimate of returns called as range to assess the risk involved, but it is crude/rough basis of risk assessment.

Probability Distribution: Probability is the chance that a given outcome will occur. Based on the probabilities assigned to the rate of return, the expected value of return can be computed. *The expected rate of return is the weighted average of all the possible returns multiplied by their respective probabilities.*

Expected return

$$\bar{K} = \sum_{i=1}^n K_i \times P_{r_i}$$

n = Number of outcomes associated.

Example : Suppose, an asset X has the following returns and their probabilities. Calculate expected return from this asset.

Solution :

Asset X	Returns (in Lakh)	Probability	Expected Return (in Lakh)
	12	0.1	1.2
	16	0.3	4.8
	18	0.4	7.2
	25	0.2	5
		1	18.2

$$\text{Expected return} = 12 \times 0.10 + 16 \times 0.30 + 18 \times 0.40 + 25 \times 0.20 = 18.20$$

Statistical Measures of Risk

Standard Deviation of Returns : Risk refers to the dispersion of returns around an expected value. Standard deviation from the expected value of return represents the square root of the average squared deviation of the individual returns from the expected returns.

$$\sigma = \sqrt{\sum_{i=1}^n (K_i - \bar{K})^2 \times P_{r_i}}$$



DID YOU KNOW ?

The greater the standard deviation of return, the greater the dispersion of returns and the greater the risk of investment.

Coefficient of Variables (CV) : It is a measure of relative dispersion or a measure of risk per unit of expected return. It converts standard deviation (SD) of expected returns into relative values to enable comparison of risks associated with assets having different expected value. Symbolically,

$$CV = \frac{SD}{\text{Mean}} = \frac{\sigma_{ki}}{\bar{K}}$$



**DID YOU
KNOW ?**

The larger the CV, the larger the relative risk of an asset. As a rule, the use of the coefficient of variation for comparing asset risk is the best since it considers the relative size of assets.

Risk and Return of a Portfolio

A portfolio is a combination of two or more securities having variable and separate risks associated with respective securities. The expected return on a portfolio is the weighted average of the expected returns of the securities comprising the portfolio.

Focus
ormula



$$\bar{K}_p = \sum_{i=1}^n W_i K_i$$

where n = Total number of securities in a portfolio

W_i = Proportion invested in security i

K_i = Expected return of security i

Theories of Profit

1

Rent Theory of Profit

2

Wage Theory of Profit

3

Risk Theory of Profit

4

The Dynamic Theory of Profit

5

Schumpeter's Innovation Theory

6

Uncertainty Bearing Theory of Profit

7

Marginal Productivity Theory of Profit

1. Rent Theory of Profit : *This theory was first propounded by the American Economist Walker.* It is based on the ideas of Seniors and J.S. Mill. According to Mill, "the extra gains which any producer obtains through superior talents for business or superior business arrangements are very much of a kind similar to rent. Walker says that "Profits are of the same genus as rent". His theory of profits states that profit is the rent of superior entrepreneur over marginal of less efficient entrepreneur.

According to these economists, there was a good deal of similarity between rent and profit. Rent was the reward for the use of land while a profit was the reward for the ability of the entrepreneur. Just as land differs from one another in fertility, entrepreneurs differ from one another in ability. Rent of superior land is determined by the difference in productivity of the marginal and super marginal land; similarly the profits of the marginal and super marginal entrepreneurs.

In short it is the intra-marginal lands that earn a surplus over marginal lands. So also intra marginal entrepreneurs earn a surplus over marginal entrepreneur. Just as there is the marginal land, there is the marginal entrepreneur. The marginal land yields no rent; so also marginal entrepreneur is a no profit entrepreneur.

The marginal entrepreneur sells his produce at cost price and gets no profit. He secures only the wages of management not profit. Thus profit does not enter into cost of production. Like rent, profit also does not enter into price. Profit is thus a surplus.

2. Wage Theory of Profit : *This theory was propounded by Taussig, the American economist.* According to this theory, profit is also a type of wage which is given to the entrepreneur for the services rendered by him. *In the words of Taussig, "profit is the wage of the entrepreneur which accrues to him on account of his ability".*

Just as a labourer receives wages for his services, the entrepreneur who works hard gets profit for the part played by him in the production. The only difference is that while labourer renders physical services, entrepreneur puts in mental work. Thus an entrepreneur is not different from a doctor, lawyer, teacher, etc., who do mental work. Profit is thus a form of wage.

3. Risk Theory of Profit : *This theory is associated with American economist Hawley.* According to him profit is the reward for risk-taking in business. Risk-taking is supposed to be the most important function of an entrepreneur. Every production that is undertaken in anticipation of demand involves risk. According to Drucker there are four kinds of risk. They are replacement, obsolescence, risk proper and uncertainty.

The first two are calculated and therefore they are insured. But the other two are unknown and unforeseen risks. It is for bearing such risk profit is paid to entrepreneur. No entrepreneur will be willing to undertake risks if he gets only the normal return.

Therefore the reward for risk-taking must be higher than the actual value of the risk. If the entrepreneur does not receive the reward, he will not be prepared to undertake the risk. Thus higher the risk greater is the possibility of profit.

According to Hawley the entrepreneur can avoid certain risks for a fixed payment to the insurance company. But he cannot get rid of all risks by means of insurance. If he does so he is not an entrepreneur and would earn only wages of management and not profit.

4. The Dynamic Theory of Profit : *Prof. J.B. Clark propounded the dynamic theory of profit in the year 1900.* To him profit is the difference between the price and the cost of production of the commodity. Profit is the result of progressive change in an organized society.

The progressive change is possible only in a dynamic state. According to Clark the whole economic society is divided into organized and unorganized society. The organized society is further divided into static and dynamic state. Only in dynamic state profit arises.

In a static state, the five generic changes such as the size of the population, technical knowledge, the amount of capital, method of production of the firms and the size of the industry and the wants of the people do not take place; everything is stagnant and there is no change at all. The element of time is non-existent and there is no uncertainty. The same economic features are repeated year after year.

Therefore there is no risk of any kind to the entrepreneur. The price of the good will be equal to the cost of production. Hence profit does not arise at all. The entrepreneur would get wages for his labour and interest on his capital. If the price of the commodity is higher than the cost of production, competition would reduce the price again to the level of the cost of production so that profit is eliminated.

The presence of perfect competition makes the price equal to the cost of production which eliminates the super normal profit. Thus Knight observes, "Since costs and selling prices are always equal, there can be no profit beyond wages for the routine work of supervision".

It is well known that the society has always been dynamic. Several changes are taking place in a dynamic society.

According to Clark five major changes are constantly taking place in a society. They are :

1. Changes in the size of the population,
2. Changes in the supply of capital,
3. Changes in production techniques,
4. Changes in the forms of industrial organisation, and
5. Changes in human wants.

These dynamic changes affect the demand and supply of commodities which leads to emergence of profit. Sometimes individual firms may introduce dynamic changes. For example, a firm may improve its production technique, reduce its cost and thereby increase its profit. The typical dynamic change is an invention. This enables the entrepreneur to produce more and reduce costs, leading to emergence of profit.

5. Schumpeter's Innovation Theory : *This theory was propounded by Schumpeter.* This theory is more or less similar to that of Clark's theory. Instead of five changes mentioned by Clark, Schumpeter explains the change caused by innovations in the production process. According to this theory profit is the reward for innovations. He uses the term innovation in a sense wider than that of the changes mentioned by Clark.

Innovation refers to all those changes, in the production process with an objective of reducing the cost of commodity so as to create gap between the existing price of the commodity and its new cost. Innovation may take any shape like introduction of a new technique or a new plant, a change in the internal structure or organizational set up of the firm or change in the quality of raw material, a new form of energy, better method of salesmanship, etc.

Schumpeter makes a distinction between invention and innovation. Innovation is brought about mainly for reducing the cost of production and it is cost reducing agent. Profit is the reward for this strategic role, Innovations are not possible by all entrepreneurs. Only exceptional entrepreneurs can innovate. They are capable of tapping new resources, technical knowledge and reduce the cost of production. Thus the main motive for introducing innovation is the desire to earn profit. Profit is therefore the cause of innovation.

Profits are of temporary nature. The pioneer who innovates earns abnormal profit for a short period. Soon other entrepreneurs, "swarm in clusters", compete for profit in the same manner. The pioneer will make another innovation. In a dynamic world innovation in one field may induce other innovations in related fields.

The emergence of motor car industry may in turn stimulate new investments in the construction of highways, rubber, tyres and petroleum products. Profits are thus causes and effects of innovation. The interest of profit leads entrepreneur to innovate and innovation leads to profit. Thus profit has a tendency to appear, disappear and reappear.

Profits are caused by innovation and disappear by imitation. Innovational profit is thus, never permanent, in the opinion of Schumpeter. Therefore it is different from other incomes, such as rent, wages and interest. These are regular and permanent incomes arising under all circumstances. Profit on the other hand is a temporary surplus resulting from innovation.

Prof. Schumpeter also explained his views on the functions of the entrepreneur. The entrepreneur organizes the business and combines the various factors of production. But this is not his real function and this will not yield him profit. The real function of the entrepreneur is to introduce innovations in business. It is innovations which yield him profit.

6. Uncertainty Bearing Theory of Profit : *This theory was propounded by an American economist Prof. Frank H. Knight. This theory, starts on the foundation of Hawley's risk bearing theory. Knight agrees with Hawley that profit is a reward for risk-taking. There are two types of risks viz. foreseeable risk and unforeseeable risk. According to Knight unforeseeable risk is called uncertainty bearing.*

Knight, regards profit as the reward for bearing non-insurable risks and uncertainties. He distinguishes between insurable and non-insurable risks. Certain risks are measurable, the probability of their occurrence can be statistically calculated. The risks of fire, theft, flood and death by accident are insurable. These risks are borne by the insurance company.

The premium paid for insurance is included in the cost of production. According to Knight these foreseen risks are not genuine. Economic risks are eligible for any remuneration of profit. In other words insurable risk does not give rise to profit.

According to Knight profit is due to non-insurable risk or unforeseeable risk.

Some of the non-insurable risks which arise in modern business are as follows :

(a) Competitive Risk : Some new firms enter into the market unexpectedly. The existing firms may have to face serious competition from them. This will inevitably lower down the profit of the firms.

(b) Technical Risk : *This risk arises from the possibility of machinery becoming obsolete due to the discovery of new processes.* The existing firm may not be in a position to adopt these changes into its organization, and hence suffer losses.

(c) Risk of Government Intervention : *The government, in course of time, interferes into the affairs of the industry such as price control, tax policy, import and export restrictions, etc., which might reduce the profits of the firm.*

(d) Cyclical Risk : *This risk emerges from business cycles. Due to business recession or depression, consumer's purchasing power is reduced, consequently demand for the product of the firm also falls.*

(e) Risk of Demand : *This is generated by a shift or change of demand in the market.*

Prof. Knight calls these risks as 'uncertainties' and 'These are uncertainties in this sense which explains profit in the proper use of the term'. These risks cannot be foreseen and measured, they become non-insurable and the uncertainties have to be borne by the entrepreneur. According to this theory there is a direct relationship between profit and uncertainty bearing.

Greater the uncertainty bearing the higher the level of profit. Uncertainty bearing has become so important in business enterprise in modern days, it has come to be considered as a separate factor of production. Like other factors it has a supply price and entrepreneurs undertake uncertainty bearing in the expectation of earning certain level of profit. Profit is thus the reward for assuming uncertainty.

In the modern days production has to take place in advance of consumption. The producers have to face their rival producers and the future is uncertain and unknown. These are uncertainties. Some entrepreneurs are able to see it more clearly than others and therefore able to earn profit.

7. Marginal Productivity Theory of Profit : *The general theory of distribution is also applied to the factor, entrepreneur. According to Prof. Chapman, profits are equal to the marginal worth of the entrepreneur and are determined by the marginal productivity of the entrepreneur. When the marginal productivity is high, profits will be high.*

Just as marginal revenue productivity of any factor represents the demand curve of a factor. The marginal revenue productivity curve of entrepreneur is the demand curve of an entrepreneur. As more and more firms enter into the industry, the marginal revenue productivity (MRP) of entrepreneurship decreases. The slope of the MRP curve will be negative. The supply curve of entrepreneur will be perfectly elastic under perfect competition.

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